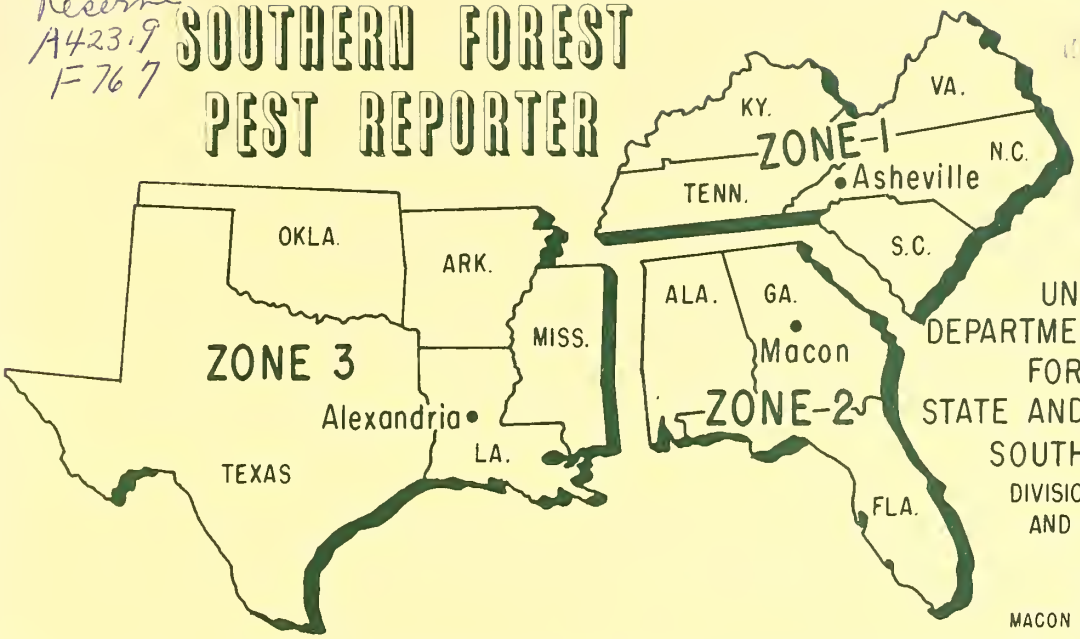
SOUTHERN FOREST PEST REPORTER



UNITED STATES
DEPARTMENT OF AGRICULTURE
FOREST SERVICE
STATE AND PRIVATE FORESTRY
SOUTHEASTERN AREA
DIVISION OF FOREST INSECT
AND DISEASE CONTROL

ZONE OFFICES
ASHEVILLE N.C
MACON GA ALEXANDRIA LA.

Number 1 50 SEVENTH ST. N.E. ATLANTA, GEORGIA 30323 February 1967

SUMMARY OF CONDITIONS

... Southern pine beetle populations on National Forest land continue on the Francis Marion in South Carolina, on the Homochitto in Mississippi, and on the Talladega in Alabama.

... On private lands, epidemic southern pine beetle populations continue in Alabama, Louisiana, North Carolina, and Texas.

... Southern pine beetle was found on the Bankhead National Forest in Alabama and in Clarke County for the first time in several years.

... Shortleaf pine seed production areas in Arkansas treated for control of seed and cone insects show an increase in seed and cone production when compared with untreated checks.

... Four additional areas of balsam woolly aphid infestation were detected on Roan Mountain in 1966. Additional infestations were also found on Grandfather Mountain and in the Great Smoky Mountains National Park.

... Widespread mortality of scarlet oak occurred during late 1966 on the George Washington and portions of the Jefferson National Forests. Believed to be the result of early spring defoliation coupled with mid-summer drought.

STATUS OF FOREST INSECTS

SOUTHERN PINE BEETLE, Dendroctonus frontalis Zimm.

ALABAMA

Chemical control continues on the Shoal Creek, Talladega, Oakmulgee, and Tuscaloosa Districts of the Talladega National Forest. Appraisal surveys and biological evaluations are scheduled for the spring to determine the status of the beetle population on these areas.

Recently, southern pine beetle infestations were found on the Bankhead National Forest. A survey and evaluation is scheduled for the spring of 1967 to determine the status of the beetle population. This is the first known occurrence of the southern pine beetle on the Bankhead since 1960.

Infestations on private land in Jefferson, Walker, Blount, Shelby, and St. Clair counties continue to occur. Salvage and chemical control is being continued by some landowners.

The first known occurrence of the southern pine beetle in south Alabama in several years occurred in Clarke County recently. Salvage and chemical control methods are being employed.

GEORGIA

Scattered endemic southern pine beetle infestations continue on the Tallulah and Chattooga Districts of the Chattahoochee National Forest and on the Uncle Remus District of the Oconee National Forest. No known controls are being employed.

Populations considered to be endemic continue to exist on private land in the northeastern and west-central portions of Georgia.

LOUISIANA

Southern pine beetle infestations in southeast Louisiana decreased from 41 infested trees per 1,000 acres in July to 6.72 in November. Most of the infested spots were found in East and West Feliciana Parishes. The infestation has now extended itself into St. Helena and Baton Rouge Parishes.

MISSISSIPPI — Results of a November survey on the Homochitto National Forest showed approximately 7.49 southern pine beetle infested trees per 1,000 acres. This is about the same number of infested trees as found in an August survey, but brood estimates from bark sample data show a sixfold increase from August to November. Southern pine beetle was also found to be active on the Natchez District of the Natchez Trace Parkway.

NORTH CAROLINA — Infestations are continuing at a moderate level in the upper Piedmont counties. Localized infestations also occur in portions of the coastal plain.

SOUTH CAROLINA — Southern pine beetle activity is continuing at a low level on the Andrew Pickens District of the Sumter National Forest. January surveys revealed a level of 8.62 spots and 2.15 actively infested trees per thousand acres host type.

The southern pine beetle is in outbreak status on the Francis Marion National Forest. The present estimated level of infestation is .60 spots and 2.75 trees per 1,000 acres host type. This level of infestation is believed conservative because broods are overwintering in single green trees over the entire forest. Vigorous salvage and chemical control operations are underway to reduce losses and prevent additional infestations in the spring and summer months.

TENNESSEE — Infestations of the southern pine beetle continue at a low level on the Atomic Energy Commission Oak Ridge Reservation and adjoining lands. The present level of infestation is estimated at 13.12 spots and 1.76 actively infested trees per 1,000 acres host type. Small scale salvage and chemical control operations are continuing.

TEXAS — A 1967 January survey showed approximately 4.0 infested trees per 1,000 acres. This is the highest level found in January since operations recorder surveys were started in the fall of 1962.

VIRGINIA — Activity is continuing at a low level in several counties in the Virginia Piedmont.

BLACK TURPENTINE BEETLE, Dendroctonus terebrans (Oliver)

TEXAS — During the previous quarter, control operations against this insect were carried out in a twelve-county area on private and Federal lands. Efforts to further reduce the beetle populations were continued on National Forest land in Houston, Montgomery, Trinity, and Walker counties. Treatment of infested loblolly and shortleaf pines consisted of salvaging killed or heavily infested trees and spraying infested trees with BHC solution. (Texas Forest Service)

IPS ENGRAVER BEETLES

AREA — Ips engraver beetle activity for the Area is considered normal for this season of the year.

SEED AND CONE INSECTS

ARKANSAS — The two shortleaf pine seed production areas on the Ozark-St. Francis National Forest were again aerially sprayed to suppress seed and cone insects. Results show an increase in cone and seed production in treated areas when compared with untreated checks.

Studies made to date indicate Dioryctria to be the major insect pest both in first- and second-year cones while Laspeyresia is the next most damaging insect in second-year cones.

LOUISIANA — Studies on the Vernon Longleaf Seed Production Area, Kisatchie National Forest, indicated that infestations were high in 1966. In September, collections over 85 percent of the second-year cones showed insect damage. Cutting test results indicated it was not economical to collect cones for seed extraction because of the low number of seed per cone.

Insect damage in the Colfax Loblolly Seed Production Area, Kisatchie National Forest, was found in over 46 percent of the second-year cones sampled.

Overall insect damage to cones was much higher in 1966 than in 1965.

NORTH CAROLINA

Surveys conducted in the Persimmon Creek Shortleaf Pine Seed Production Area near Murphy revealed a low level of seed and cone insect activity. Overall insect caused loss to the cone crop was 0.1 percent of the first-year cones and 4.6 percent of the second-year cones. A coneworm, Eucosma sp., accounted for 2.3 percent of the damage to second-year cones and cone midges (Family Cecidomyiidae) infested 2.1 percent of the second-year cones. A chloropid, Hapleginella (=Oscinella) conicola (Green) was recovered from cones infested by cecidomyiids. This is believed to be the first recovery of this insect from shortleaf pine cones. Seedworms, Laspeyresia sp., destroyed an estimated 0.9 percent of the seed crop.

SOUTH CAROLINA

A low incidence of seed and cone insect activity occurred at the Mason Loblolly Pine Seed Production Area near Edgefield. A total of 1.8 percent of the first-year cones and 2.4 percent of the second-year cones were destroyed by insects. Coneworms of the genus Dioryctria and midges of the Family Cecidomyiidae were collected from both first- and second-year cones. Seedworms, Laspeyresia sp., destroyed 1.2 percent of the seed crop.

Low levels of seed and cone insect activity occurred at the Brick Church and Hoodtown Longleaf Pine Seed Production Areas on the Francis Marion National Forest. Coneworms, Dioryctria sp., damaged 3.8 percent of the first-year cones and 2.5 percent of the second-year cones on the Brick Church Seed Production Area. An estimated 3.8 percent of the second-year cones were destroyed by Dioryctria sp. on the Hoodtown Seed Production Area. First-year conelet abortion accounted for 9.8 percent loss. The seedworm, Laspeyresia ingens Heinrich, caused a loss of 14.6 and 9.9 percent of the seed crop on Brick Church and Hoodtown Seed Production Areas respectively.

A pilot test designed to reduce seed and cone insect infestations on the Brick Church Seed Production Area failed to significantly reduce seed and cone insect infestations in that area.

BALSAM WOOLLY APHID, Adelges piceae (Ratz)

NORTH CAROLINA & TENNESSEE

Four additional areas of balsam woolly aphid infestations were detected on Roan Mountain in 1966. Some 400 acres of the 1,389 acre spruce-fir forest on Roan Mountain are now infested by this insect. Three additional areas of infestation were detected in 1966 on Grandfather Mountain.

An additional infestation was detected in the Great Smoky Mountains National Park on the headwaters of Big Creek. In addition, a number of localized infestations were detected between Mt. Sterling and Cataloochee Knob where infestations were originally detected in 1963 and 1964 respectively. An estimated 2,280 acres of the 38,720 acre spruce-fir forest in the Great Smoky Mountains National Park are now infested by the balsam woolly aphid.

VIRGINIA

Individual trees in the scattered fir type in the Skyland and Hawkbill areas of the Shenandoah National Park continue to die due to balsam woolly aphid infestation. Intensive surveys of the 500 acre spruce-fir type in the Mt. Rogers National Recreation Area failed to reveal the presence of the balsam woolly aphid infestations.

OAK LEAF TIER, Croesia semipurpurana (Kft.)

VIRGINIA

Some 5,000 acres of scarlet oak forests on the James River District of the George Washington National Forest were infested by oak leaf tier in 1966. Recently completed egg surveys, designed to predict the potential for defoliation by the insect in 1967, indicate that extensive damage may occur. Some eggs were collected at each of 20 sample plots. Large numbers of eggs were found in the Dolly Ann Hollow and Rumsey section where defoliation was moderate to heavy in 1966.

EASTERN TENT CATERPILLAR, Malacosoma americanum (F.)

KENTUCKY — A state-wide egg mass survey was conducted to determine the potential for damage by the eastern tent caterpillar. This survey indicated that portions of Letcher, Morgan, Menifee, Powell, Bath, Montgomery, Marion, Taylor, Casey, Green, and Adair counties may expect an increase in intensity of damage as compared to 1966.

SAWFLIES, Neodiprion sp.

FLORIDA — Defoliation caused by the sawfly, Neodiprion merkeli, was scattered over 1500 acres of slash pine in Hendry County.

GEORGIA — A black-headed sawfly (species undetermined) was observed defoliating mature slash pine trees in Loundes County.

MISCELLANEOUS INSECTS

NORTH CAROLINA — Heavy infestations of tip moths, Rhyacionia sp., occurred at a seed orchard located at the Edwards Nursery near Morganton.

ALABAMA — A twig girdler, Oncideras cingulatus (Say), caused considerable damage to hickory trees in DeKalb, Jackson, and Marshall counties.

VIRGINIA — Infestations of woodboring insects of the families Buprestidae, probably Melanophila sp., and Cerambycidae were reported in eastern hemlock on the George Washington National Forest. Infestations are confined to large over-mature trees.

FLORIDA — The weevil, Pissodes nemorensis, caused considerable damage to young slash pine plantations in northwest Florida.

STATUS OF FOREST DISEASES

ANNOSUS ROOT ROT, Fomes annosus (Fr.) Cooke

ALABAMA — Heavy infections were found in two areas on the Bankhead District of the Bankhead National Forest.

Summer thinning and stump treatment with borax has given satisfactory results for control of annosus root rot on the Anniston Army Depot, Anniston, Alabama.

GEORGIA — Infections have been found in approximately 1/3 of the counties in Georgia.

TEXAS — Fomes annosus root rot continues to cause damage in recently thinned pine stands in Texas. Mortality is increasing in stands previously reported infected with F. annosus. (Texas Forest Service)

OAK MORTALITY

Widespread mortality of scarlet oak occurred during late 1966 on portions of the George Washington National Forest, the Jefferson National Forest, and adjoining private lands. Some 103,800 acres of oak mortality were detected on the George Washington National Forest, much of which was concentrated on the James River District. At least 5,800 acres of oak mortality occurred on the Jefferson National Forest. The cause of this mortality is not clearly understood, but is believed to be the result of a complex of factors including an early spring defoliation by insects and/or frost coupled with a mid-summer drought.

MISCELLANEOUS DISEASES

LOUISIANA — A blight, probably caused by Cercospora thujina, is causing mortality in Christmas tree plantings of Arizona cypress near Winnsboro, Louisiana.

MISSISSIPPI — An unidentified canker disease of live oak is causing mortality near Collins, Mississippi.

NORTH CAROLINA — Extensive needle discoloration and defoliation of Fraser fir caused by the fungus, Hypodermella nervata Darker, made fir trees in sale units on Roan Mountain undesirable for Christmas trees.

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More detailed information can be obtained by writing to the Division of Forest Insect and Disease Control Zone Offices listed below or to the Atlanta Office:

ZONES	FOR STATES OF
Zone 1 William M. Ciesla Zone Leader P. O. Box 1211 Asheville, North Carolina 28802 Tel. No. AC 704 254-0961, Ext. 625	Kentucky North Carolina South Carolina Tennessee Virginia
Zone 2 William H. Padgett Zone Leader P. O. Box 1077 Macon, Georgia 31202 Tel. No. AC 912 746-3531	Alabama Florida Georgia
Zone 3 Henry H. Galusha, Jr. Zone Leader 2500 Shreveport Highway Pineville, Louisiana 71360 Tel. No. AC 318 445-6511, Ext. 311	Arkansas Louisiana Mississippi Oklahoma Texas